

Week 3: Grouping Your Expenses for Smarter Spending

Group your expenses: Imagine sorting receipts by category (Groceries, Entertainment, etc.). We'll do this with GROUP BY in SQL. Count and total: Find out how many expenses you have in each category and how much you spent in total for each one. We'll use COUNT and SUM functions. Average it out: Calculate the average expense amount for each category. This will be done with the AVG function. Let's Practice! (2 hours)

```
USE expense_tracker;
```

```
SELECT
```

```
    category,
```

```
    COUNT(*) AS num_expenses,
```

```
    SUM(amount) AS total_spent
```

```
FROM expenses
```

```
GROUP BY category;
```

```
USE expense_tracker;
```

```
SELECT
```

```
    category,
```

```
    COUNT(*) AS num_expenses,
```

```
    SUM(amount) AS total_spent,
```

```
    ROUND (AVG(amount),2) AS avg_expense
```

```
FROM expenses
```

```
GROUP BY category;
```

1.1. Total Spent per Category: Write a query to find the total amount you spent in each category (Groceries, Entertainment, etc.). Hint: Use GROUP BY category and SUM(amount).

```
USE expense_tracker;
```

```
SELECT category, SUM(amount) AS total_spent
```

```
FROM expenses
```

```
GROUP BY category;
```

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1.2. Average Expense per Category: Now, let's see the average cost for each category. Write a query to find the average expense amount for each category. Hint: Use GROUP BY category and AVG(amount).

```
USE expense_tracker;
```

```
SELECT category, ROUND(AVG(amount),2) AS avg_expense
```

```
FROM expenses
```

```
GROUP BY category;
```

Bonus Challenge (Optional):

Are you curious about your top spending categories? Modify your query from Challenge 1 to show only the top 3 (or a chosen number) categories where you spend the most

```
USE expense_tracker;
```

```
SELECT category, SUM(amount) AS total_spent
```

```
FROM expenses
```

```
GROUP BY category
```

```
ORDER BY total_spent DESC
```

```
LIMIT 3;
```